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Working Paper Series

1991 Schools and Staffing Survey (SASS) Reinterview Response Variance Report

Working Paper No. 94-03

July 1994

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July 1994

Foreword

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1991 SCHOOLS AND STAFFING SURVEY (SASS)

REINTERVIEW RESPONSE VARIANCE REPORT

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Subject: 1991 Schools and Staffing Survey (SASS) Reinterview
Response Variance Report

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I. Executive Summary

A. Purpose

This reinterview measured response variance of selected questions from the 1991 SASS administrator, school, and teacher questionnaires.

Response variance measures one component of the non-sampling error in the data collected by a question. Response variance indicates how consistently respondents answer questions in the survey. High response variance means the respondents are very inconsistent. Users should be careful interpreting data with moderate to high response variance, especially when using these data in cross-classifications.

B. Major Findings

1. General

- Thirty-nine percent of the questions in the 1991 SASS showed low response variance. This was significantly better than the 1988 SASS (11 percent).¹ (See table A.)

Table A. Response Variance Summary

| Questionnaire | <u>Low</u> | | <u>Moderate</u> | | <u>High</u> | | <u>Could not Measure²</u> | |
|------------------|------------|----------|-----------------|----------|-------------|----------|--------------------------------------|-----|
| | '88 | '91 | '88 | '91 | '88 | '91 | '88 | '91 |
| SASS-2 - Admin. | 1 (11%) | 5 (20%) | 4 (44%) | 10 (40%) | 4 (44%) | 10 (40%) | 2 | 1 |
| SASS-3 - School | 0 (0%) | 17 (47%) | 6 (43%) | 12 (33%) | 8 (57%) | 7 (19%) | 0 | 8 |
| Mail Reint. | NA | 19 (41%) | NA | 15 (33%) | NA | 12 (26%) | NA | 9 |
| Phone Reint. | 0 (0%) | 16 (46%) | 6 (43%) | 6 (17%) | 8 (57%) | 13 (37%) | 0 | 9 |
| SASS-4 - Teacher | 3 (25%) | 21 (44%) | 4 (33%) | 16 (33%) | 5 (42%) | 11 (23%) | 8 | 8 |
| TOTAL | 4 (11%) | 43 (39%) | 14 (40%) | 38 (35%) | 17 (49%) | 28 (26%) | 10 | 17 |

¹ Percentages based on questions where we could produce a reliable measure of the index of inconsistency.

² Unable to measure index of inconsistency accurately.

- There was no difference in response variance between public and private administrators, schools, or teachers.

2. SASS-2(R), Public and Private School Administrators

- The two training questions had moderate to high response variance.
- Eighty percent of the administrators reported the same annual salary in the original interview and the reinterview. (The responses were within ± 5 percent of each other.)
- The annual salary question showed low response variance (12.8 for public school administrators and 18.6 for private school administrators).

3. SASS-3(R)M and SASS-3(R)T, Public and Private Schools

- All of the questions on the school questionnaire had lower response variance when the respondent was interviewed originally by mail and reinterviewed by mail, compared to when the respondent was interviewed originally by mail or telephone and reinterviewed by telephone.
- Of the respondents that answered the school questionnaire by mail in both the original interview and the reinterview, 87 percent agreed on the number of students enrolled in the school this year. Seventy-seven percent agreed on the number of students enrolled last year. (Responses were within ± 5 percent.)
- Of the respondents that answered the school questionnaire by mail or telephone in the original interview, and telephone in the reinterview, 69 percent agreed on the number of students enrolled in the school this year. Fifty-eight percent agreed on the number of students enrolled last year. (Responses were within ± 5 percent.)

4. SASS-4(R), Public and Private School Teachers

- The four training questions had moderate to high response variance.
- Seventy-one percent of the teachers reported the same base year salary in the original interview and the reinterview. (Responses were within ± 5 percent.)
- The annual salary question showed moderate response variance (23.2) for public school teachers and low response variance (16.5) for private school teachers.

C. Recommendations

- Reliability of SASS questions improved from 1988, but more work needs to be done.
- Drop the question on the SASS school questionnaires that asks for the community in which the school is located. The National Center for Education Statistics (NCES) will obtain this information from geographic files.

II. Response Variance Results

An "*" in the tables in this report indicates that the data from the question did not meet the minimum requirements necessary to compute a reliable estimate of the index. (See section III on page 26 for a detailed description of this measure.)

Note: Tables containing the indices for each category of a question are available upon request.

A brief description of how to interpret the index is as follows:

| <u>If the index value is:</u> | <u>Level of Response Variance</u> | <u>Interpretation</u> |
|-------------------------------|-----------------------------------|-----------------------|
| < 20 | Low | Not a Major Problem |
| 20 - 50 | Moderate | Some Problems |
| > 50 | High | Major Problems |

We classified the questions into the following groups:

- Questions on SASS-2(R), Public and Private School Administrators

| <u>Question Group</u> | <u>Questions Numbers</u> |
|---|--------------------------|
| (1) Degree Information | 1a-e, 2a-c |
| (2) Training | 4, 6 |
| (3) Other Positions Held / Experience - Future Plans | 3, 5, 7a-b, 8b |
| (4) Annual Salary | 8a |

- Questions on SASS-3(R)M and SASS-3(R)T, Public and Private Schools

Results for questions on the School Questionnaire are broken down by 1) total, 2) SASS-3(R)M, and 3) SASS-3(R)T.

| <u>Question Group</u> | <u>Questions Numbers</u> |
|--|--------------------------|
| (1) Student Population / Teacher Population | 1a-b, 8, 9a-b |
| (2) Type of School / Community | 2, 3, 4, 5 |
| (3) Grades and Classes | 6a-h, 7 |
| (4) Teaching Vacancies / Teacher Programs | 10a-c, 11, 12 |

• Questions on SASS-4(R), Public and Private School Teachers

| <u>Question Group</u> | <u>Questions Numbers</u> |
|--|-----------------------------|
| (1) Assignment and Activity (This Year) | 1, 10a-b, 15 |
| (2) Teaching Experience | 2, 4a-b, 5a-b, 6, 16, 17 |
| (3) Degree Information | 7a-b, 8a-b, 9a-c |
| (4) Training / Teaching Certificate | 11, 12, 13a-b, 14a-b |
| (5) Main Activity (Past and Future) | 3, 18a-b |
| (6) Salaries | 19a(1-3), 19b(1-3) |

A. Response Variance Results: School Administrator Survey,
SASS-2

1. Degree Information

This group contains three yes/no questions, three multiple choice questions, and two open ended questions. They asked about the degrees the respondent had earned.

Questions 1b, 1e, and 2b asked for the respondent's major field of study for his/her degree(s). There were 79 choices for the respondent to choose from. We collapsed these 79 choices into 9 main categories (the categories that were on the questionnaire):

- (1) General Education (3 choices)
- (2) Subject Area Education (18 choices)
- (3) Special Education (11 choices)
- (4) Other Education (5 choices)
- (5) General (25 choices)
- (6) Foreign Languages (6 choices)
- (7) Natural Sciences (5 choices)
- (8) Social Sciences (5 choices)
- (9) Other (1 choice)

See Appendix 1 for a list of the fields of study in each category.

The two open ended questions asked for the year of the respondent's bachelor's and master's degree. Per NCES, we divided the responses into the following answer categories:

- | | |
|----------|---------------------|
| (1) 1991 | (5) 1985-1987 |
| (2) 1990 | (6) 1981-1984 |
| (3) 1989 | (7) 1976-1980 |
| (4) 1988 | (8) 1975 and before |

Table B shows the breakdown of the indices for the questions in this group.

**Table B. Response Variance and Gross Difference Rates:
Degree Information
(Questions 1a-e and 2a-c)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|---|------------------------------|-------------------------|----------------|
| 1a Do you have a bachelor's degree? | 2 | * | 1.3 |
| 1b What was your major field of study? | 9 | 41.9 | 32.0 |
| 1c In what year did you receive your bachelor's degree? | 8 | 11.7 | 2.6 |
| 1d Did you have a second major or minor field of study? | 2 | 42.3 | 16.9 |
| 1e What was your second major or minor field of study? | 9 | 55.3 | 43.2 |
| 2a Do you have a master's degree? | 2 | 11.3 | 1.7 |
| 2b What was your major field of study? | 9 | 42.1 | 26.1 |
| 2c In what year did you receive your master's degree? | 8 | 19.2 | 11.9 |

Each individual category for questions 1b, 1e, and 2b had moderate to high indices of inconsistency. Some of this is due to similar degrees being in different categories.

For example, there were 58 respondents who answered either "English" or "English education" as their major field of study for their bachelor's degree in the original interview and the reinterview. Twenty-seven changed their answer from "English" to "English education" or vice versa in the reinterview. "English" is in the "General" category, while "English education" is in the "Subject Area Education" category.

For the "year of degree" questions, we also checked to see the difference in the number of years between responses. We used only those cases with a year response in both interviews. (See table C on page 6.)

**Table C. Case Status:
Year of Bachelor's Degree and Master's Degree
(Questions 1c and 2c)**

| <u>Status</u> | Number of cases | |
|---|-------------------|-----------------|
| | <u>Bachelor's</u> | <u>Master's</u> |
| Number of Forms Keyed | 980 | 980 |
| Don't Know or Refused in reinterview | 2 | 3 |
| Blank in reinterview OR original interview | 54 | 129 |
| Year responses in BOTH interviews | 924 | 848 |

For the year of the bachelor's degree, 85 percent agreed exactly, and 90 percent agreed within plus or minus one year. For the year of the master's degree, 71 percent agreed exactly, and 84 percent agreed within plus or minus one year. (See table D.)

**Table D. Difference in Responses:
Year of Bachelor's and Master's Degrees
(Questions 1c and 2c)**

| <u>Question</u> | Difference in Responses (Number of years) | | | |
|-----------------|---|-----------|------------|---------------|
| | <u>0</u> | <u>1</u> | <u>2-5</u> | <u>> 5</u> |
| 1c (Bachelor's) | 785 (85%) | 47 (5%) | 55 (6%) | 37 (4%) |
| 2c (Master's) | 602 (71%) | 108 (13%) | 72 (8%) | 66 (8%) |

2. Training

These two questions asked if the respondent had any training before becoming an administrator. Question four was a yes/no question that asked, "Prior to becoming an administrator, did you participate in any school training or development program for ASPIRING school administrators?"

Question six was a "mark all that apply" question that asked, "Aside from college coursework for a degree, have you had any of these types of training for your current position?" This question had four categories. For analysis we created a "mention/did not mention" table for each category. The question was tallied in all tables when at least one of the four categories was marked in both interviews. A "mention" was tallied if the category was marked. A "did not mention" was tallied if the category was not marked.

Both questions had high response variance. (See table E.)

**Table E. Response Variance and Gross Difference Rates:
Training
(Questions 4 and 6)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|---|------------------------------|-------------------------|----------------|
| 4 (training for ASPIRING school administrators) | 2 | 61.2 | 30.2 |
| 6-1 Inservice training in evaluation and supervision | 2 | 63.1 | 16.4 |
| 6-2 Training in management techniques | 2 | 63.9 | 24.6 |
| 6-3 An administrative internship | 2 | 49.5 | 22.8 |
| 6-0 None of the above | 2 | 68.2 | 11.1 |

3. Other Positions Held / Experience - Future Plans

This group of questions asked about other school positions the respondent held, job experience, and future plans as an administrator.

Question 3 was a "mark all that apply" question. We analyzed this question using the "mention/did not mention" criteria.

Questions 5, 7b, and 8b were open ended questions. Per NCES, we created the following categories for questions 5 and 7b:

- | | |
|-----------------------|---------------------------|
| (1) less than 3 years | (3) 10 to 20 years |
| (2) 3 to 9 years | (4) greater than 20 years |

The categories for question 8b were:

- | | |
|------------------------|---------------|
| (1) Less than 8 months | (4) 10 months |
| (2) 8 months | (5) 11 months |
| (3) 9 months | (6) 12 months |

Question 7a was a multiple choice question.

Table F shows the indices for each question in this group.

**Table F. Response Variance and Gross Difference Rates:
Other Positions Held / Experience - Future Plans
(Questions 3, 5, 7a-b, and 8b)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|---|------------------------------|-------------------------|----------------|
| 3 What other school positions, if any, did you hold before you became a principal? | | | |
| 3-1 Department head or curriculum coordinator | 2 | 53.5 | 21.5 |
| 3-2 Assistant principal of program director | 2 | 31.6 | 15.8 |
| 3-3 Guidance counselor | 2 | 29.8 | 5.5 |
| 3-4 Athletic coach | 2 | 37.7 | 15.9 |
| 3-5 Sponsor for student clubs, debate teams | 2 | 75.9 | 31.4 |
| 3-6 Other - Specify | 2 | 96.6 | 65.4 |
| 3-0 None | 2 | 88.1 | 15.2 |
| 5 Prior to this school year, how many years have you been employed as the principal in this school? | 4 | 22.7 | 15.1 |
| 7a How long do you plan to remain a principal? | 5 | 64.7 | 47.3 |
| 7b In how many years do you plan to retire from your position as a principal? | 4 | 30.6 | 19.8 |
| 8b For how many months of the year are you employed as the administrator in this school? | 4 | 24.8 | 14.5 |

4. Annual Salary

This question was an open-ended one which asked, "What is your current ANNUAL salary for this position before taxes and deductions?" The respondent was to provide his/her salary to the nearest whole dollar. Per NCES, we divided the responses into the following categories, split by public and private school teacher:

Public

- (1) \$0 - \$41,000
- (2) \$41,001 - \$48,200
- (3) \$48,201 - \$57,000
- (4) \$57,001 - \$102,000

Private

- (1) \$0 - \$19,000
- (2) \$19,001 - \$30,000
- (3) \$30,001 - \$46,000
- (4) \$46,001 - \$150,000

Both had low response variance. (See table G.)

**Table G. Response Variance and Gross Difference Rates:
Annual Salary
(Question 8a)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|----------------------------|------------------------------|-------------------------|----------------|
| 8a Annual Salary - Public | 4 | 12.8 | 9.6 |
| 8a Annual Salary - Private | 4 | 18.6 | 13.9 |

We also computed the percent difference between the reinterview salary response and the original salary response. A reinterview response within ± 5 percent of the original response was classified as "Agree". All others were classified as "Disagree". We used only those cases with a response (salary or zero) in both interviews. (See table H on page 10.)

**Table H. Case Status:
Annual Salary
(Question 8a)**

| <u>Status</u> | <u>Number of cases</u> | | |
|---|------------------------|---------------|----------------|
| | <u>Total</u> | <u>Public</u> | <u>Private</u> |
| Number of Forms Keyed | 980 | 745 | 235 |
| Don't Know or Refused in reinterview | 41 | 19 | 22 |
| Blank in reinterview OR original interview | 52 | 27 | 25 |
| Salary or zero response in both interviews | 887 | 699 | 188 |

The agreement rate for this question was 82 percent for the public school teachers, and 75 percent for the private school teachers. (See table I.)

**Table I. Percent Agreement:
Annual Salary
(Question 8a)**

| <u>Question</u> | <u>% Agreement Categories</u> | | |
|-----------------|----------------------------------|------------------------|----------------|
| | <u>within ± 5</u> | <u>> 6, < 15</u> | <u>> 15</u> |
| 8a - Total | 708 (80%) | 104 (12%) | 68 (8%) |
| 8a - Public | 571 (82%) | 85 (12%) | 43 (6%) |
| 8a - Private | 137 (76%) | 19 (10%) | 25 (14%) |

B. Response Variance Results: School Survey, SASS-3

Note: In this section, "mm" refers to cases that were originally interviewed by mail AND reinterviewed by mail; "mt/tt" refers to cases that were originally interviewed by mail and reinterviewed by telephone (the "mt" part) AND cases that were originally interviewed by telephone and reinterviewed by telephone (the "tt" part).

We tested to see if response variance differed between the "mt" cases and the "tt" cases. We found no significant differences. We did find significant differences in response variance in all of the questions when we compared the "mm" cases to the "tt" cases, and the "mm" cases to the "mt" cases.¹ Therefore, we combined the "mt" and "tt" cases for the purpose of this analysis.

Note: Appendix 3 contains a discussion about the possibility of mail reinterview respondents photocopying their original questionnaires, and copying this information onto the reinterview questionnaires.

1. Student Population / Teacher Population

This group contains questions about the student population and the teacher population at the school. The two student population questions were open-ended questions, and asked:

- 1a: How many students (in head counts) were enrolled in THIS SCHOOL in grades K-12 or comparable ungraded levels on or about October 1 of THIS SCHOOL YEAR?
- 1b: How many students were enrolled ... LAST SCHOOL YEAR?

Per NCES' request, we broke the two student population questions into the following 4 categories:

- | | |
|------------------------|------------------------|
| (1) < 150 students | (3) 500 - 749 students |
| (2) 150 - 499 students | (4) ≥ 750 students |

The three teacher population questions were also open-ended questions. They asked:

- 8: How many K-12 teachers are NEW to this school this year?
- 9a: How many K-12 teachers LEFT this school between October 1 of last school year and October 1 of this school year?
- 9b: Of those K-12 teachers who LEFT this school, how many are no longer teaching in elementary or secondary schools?

¹ This comparison was for all questions where we could produce a reliable index for the "mm" cases, "tt" cases, and "mt" cases.

Per NCES' request, we broke the three teacher population questions into the following 8 categories:

- | | |
|----------------|---------------------------|
| (1) none | (5) 4 teachers |
| (2) 1 teacher | (6) 5 teachers |
| (3) 2 teachers | (7) 6-10 teachers |
| (4) 3 teachers | (8) more than 10 teachers |

The response variance for the "mm" cases was significantly lower than that for the "mt/tt" cases for all five questions. However, it was still fairly high for questions 8, 9a, and 9b. (See table J.)

**Table J. Response Variance and Gross Difference Rates:
Student Population / Teacher Population
(Questions 1a-b, 8, and 9a-b)**

| Question | L-fold Index | | | GDR (%) | | |
|------------------------------|--------------|------|-------|---------|------|-------|
| | total | mm | mt/tt | total | mm | mt/tt |
| 1a (# students THIS YEAR) | 12.3 | 7.4 | 18.2 | 8.5 | 4.9 | 12.9 |
| 1b (# students LAST YEAR) | 12.1 | 7.3 | 16.8 | 8.4 | 4.9 | 12.2 |
| 8 (NEW K-12 teachers) | 51.5 | 42.8 | 61.1 | 44.3 | 36.7 | 52.6 |
| 9a (K-12 teachers that LEFT) | 53.3 | 43.8 | 64.1 | 44.5 | 36.8 | 53.3 |
| 9b (no longer teaching) | 54.9 | 48.1 | 67.5 | 39.4 | 35.5 | 45.8 |

We also computed the percent difference between the reinterview response and the original response for the student population questions. We used only those cases with a number response in both interviews. (See table K on page 13 for the status of the responses for these two questions.)

**Table K. Case Status:
Student Population
(Questions 1a and 1b)**

| <u>Status</u> | <u>Number of cases</u> | | | | | |
|---|------------------------|-----------|--------------|------------------|-----------|--------------|
| | <u>This Year</u> | | | <u>Last Year</u> | | |
| | <u>total</u> | <u>mm</u> | <u>mt/tt</u> | <u>total</u> | <u>mm</u> | <u>mt/tt</u> |
| Number of Forms Keyed | 941 | 479 | 462 | 941 | 479 | 462 |
| Don't Know or Refused in reinterview | 11 | 0 | 11 | 35 | 0 | 35 |
| Blank in reinterview OR original interview | 237 | 95 | 142 | 87 | 46 | 41 |
| Zero response reinterview OR original interviews | 0 | 0 | 0 | 7 | 6 | 1 |
| Number responses in BOTH interviews | 693 | 384 | 309 | 812 | 427 | 385 |

The agreement rate for all cases was 79 percent for the number of students this year, and 68 percent for the number of students last year. (Responses were within ± 5 percent of each other.)

The agreement rate for both questions was significantly higher for the "mm" cases, compared to the "mt/tt" cases. (See Table L.)

**Table L. Percent Agreement:
Student Population
(Question 1a and 1b)**

| <u>Question</u> | | <u>% agreement categories</u> | | |
|-----------------|---------|----------------------------------|------------------------|----------------|
| | | <u>within ± 5</u> | <u>> 6, < 15</u> | <u>> 15</u> |
| This Year | (total) | 549 (79%) | 67 (10%) | 77 (11%) |
| | (mm) | 335 (87%) | 26 (7%) | 23 (6%) |
| | (mt/tt) | 214 (69%) | 41 (13%) | 54 (18%) |
| Last Year | (total) | 551 (68%) | 141 (17%) | 120 (15%) |
| | (mm) | 328 (77%) | 61 (14%) | 38 (9%) |
| | (mt/tt) | 223 (58%) | 80 (21%) | 82 (21%) |

2. Type of School / Community

This group contains questions regarding the kind of school, the community in which it is located, and the number of days in the school year. Three of the questions were multiple choice, and one was open-ended.

Question 4, which asks about the community in which the school is located, will not be included in the next SASS. NCES can get this information from geographic files.

The response variance for the "mm" cases was significantly lower than for the "mt/tt" cases. (See table M.)

**Table M. Response Variance and Gross Difference Rates:
Type of School / Community
(Questions 2, 3, and 4)**

| <u>Question</u> | <u>L-fold Index</u> | | | <u>GDR (%)</u> | | |
|---|---------------------|-----------|--------------|----------------|-----------|--------------|
| | <u>total</u> | <u>mm</u> | <u>mt/tt</u> | <u>total</u> | <u>mm</u> | <u>mt/tt</u> |
| 2 What is the level of this school? (4 categories) | 12.5 | 8.2 | 17.3 | 8.6 | 5.5 | 12.1 |
| 3 What type of school is this? (4 categories) | 26.7 | 16.3 | 35.4 | 6.4 | 3.4 | 9.6 |
| 4 Which of these best describes the community in which this school is located? (10 categories) | 37.6 | 24.0 | 51.9 | 30.4 | 19.0 | 42.7 |

The open ended question asked, "How many days are in the school year for students in this school?" Table N (on page 15) gives the status of responses for this question.

**Table N. Case Status:
Days in the School Year
(Question 5)**

| <u>Status</u> | Number of cases | | |
|---|-----------------|-----------|--------------|
| | <u>total</u> | <u>mm</u> | <u>mt/tt</u> |
| Number of Forms Keyed | 941 | 479 | 462 |
| Don't Know or Refused in reinterview | 4 | 0 | 4 |
| Blank in reinterview OR original interview | 111 | 62 | 49 |
| Number responses in BOTH interviews | 826 | 417 | 409 |

For analysis we used only those cases that had a number response in both interviews. We checked to see the difference in the number of days between responses. Of all the cases, seventy-one percent agreed exactly in both interviews, and 93 percent agreed within ± 5 days. The exact agreement rate was significantly higher for the "mm" cases compared to the "mt/tt" cases. (See table O.)

**Table O. Difference in Responses:
Number of Days in School Year
(Question 5)**

| <u>Question</u> | | Difference in Responses (Number of days) | | | |
|-----------------|---------|--|------------|-------------|----------------|
| | | <u>0</u> | <u>1-5</u> | <u>6-10</u> | <u>> 10</u> |
| Days in | (total) | 588 (71%) | 180 (22%) | 31 (4%) | 27 (3%) |
| School | (mm) | 321 (77%) | 76 (18%) | 11 (3%) | 9 (2%) |
| Year | (mt/tt) | 267 (65%) | 104 (26%) | 20 (5%) | 18 (4%) |

3. Grades and Classes

This group contains questions about programs that the school offers and the grade levels of instruction at the school. Eight were yes/no questions (questions 6a-h), and one (question 7) was a "mark all that apply" question. We analyzed question 7 using the "mention/did not mention" criteria.

Question 6 asked, "For each of the following programs or services, please indicate whether it is available to students in this school, either during or outside of regular school hours, and regardless of the funding source." Question 7 asked, "For what grade levels does this school offer instruction?"

All parts of question 6, with the exception of 6g, had moderate response variance over all cases. Question 6g had high response variance. Question 7 had low response variance for each of the choices, with the exception of "Ungraded" (high), "Nursery" (moderate), and "Postsecondary" (not enough information to compute a reliable index). (See table P on page 15.)

For all of the questions in this group (except question 6e) for which a reliable index could be computed, the response variance was significantly lower in the "mm" cases than the "mt/tt" cases. (See table P on page 17.)

**Table P. Response Variance and Gross Difference Rates:
Grades and Classes
(Questions 6a-h and 7)**

| <u>Question</u> | <u>L-fold Index</u> | | | <u>GDR (%)</u> | | |
|--|---------------------|-----------|--------------|----------------|-----------|--------------|
| | <u>total</u> | <u>mm</u> | <u>mt/tt</u> | <u>total</u> | <u>mm</u> | <u>mt/tt</u> |
| 6a English as a second language | 30.1 | 24.2 | 36.5 | 13.7 | 10.9 | 16.8 |
| 6b Bilingual education | 45.1 | 31.5 | 55.9 | 12.1 | 6.9 | 17.8 |
| 6c Remedial reading | 48.0 | 36.4 | 59.0 | 16.9 | 12.1 | 22.0 |
| 6d Remedial mathematics | 47.5 | 37.7 | 58.1 | 22.3 | 17.7 | 27.2 |
| 6e Programs for handicapped students | 28.1 | 25.3 | 31.2 | 10.4 | 7.8 | 13.3 |
| 6f Programs for the gifted and talented | 35.4 | 28.8 | 41.9 | 15.5 | 11.8 | 19.4 |
| 6g Diagnostic and prescriptive services | 59.7 | 54.0 | 65.2 | 20.0 | 16.2 | 24.1 |
| 6h Extended day or before- or after-school day-care programs | 24.7 | 19.7 | 29.7 | 8.8 | 6.7 | 11.2 |
| 7-1 Ungraded | 57.9 | 44.9 | 73.5 | 8.0 | 6.5 | 9.6 |
| 7-2 Nursery | 29.0 | 22.9 | * | 2.3 | 2.2 | 2.4 |
| 7-3 Prekindergarten | 19.9 | 12.1 | 28.7 | 5.2 | 3.3 | 7.3 |
| 7-4 Kindergarten | 9.9 | 5.7 | 14.6 | 5.0 | 2.8 | 7.3 |
| 7-5 1st | 10.9 | 5.7 | 16.5 | 5.4 | 2.8 | 8.2 |
| 7-6 2nd | 10.2 | 4.8 | 16.0 | 5.1 | 2.4 | 8.0 |
| 7-7 3rd | 11.3 | 5.7 | 17.4 | 5.6 | 2.8 | 8.7 |
| 7-8 4th | 11.5 | 6.1 | 17.4 | 5.8 | 3.0 | 8.7 |
| 7-9 5th | 10.6 | 5.2 | 16.5 | 5.3 | 2.6 | 8.2 |
| 7-10 6th | 10.9 | 4.8 | 17.6 | 5.4 | 2.4 | 8.7 |
| 7-11 7th | 9.4 | 3.6 | 15.7 | 4.5 | 1.7 | 7.5 |
| 7-12 8th | 10.0 | 4.0 | 16.6 | 4.9 | 2.0 | 8.0 |
| 7-13 9th | 7.4 | 4.1 | 10.9 | 3.6 | 2.0 | 5.4 |
| 7-14 10th | 6.8 | 4.3 | 9.5 | 3.3 | 2.0 | 4.7 |
| 7-15 11th | 6.1 | 2.8 | 9.5 | 2.9 | 1.3 | 4.7 |
| 7-16 12th | 4.7 | 2.3 | 7.1 | 2.3 | 1.1 | 3.5 |
| 7-17 Postsecondary | * | * | * | 2.3 | 2.2 | 2.4 |

4. Teaching Vacancies / Teacher Programs

This group contains questions regarding teaching vacancies in the school for the year, evaluation programs for teachers, and programs to help beginning teachers. The questions were:

- 10a: Were there teaching vacancies in this school year that could not be filled with a teacher qualified in the course or grade level to be taught? (2 categories)
- 10b: Did this school have any teaching vacancies this school year that could not be filled with a teacher qualified in the course or grade level to be taught? (2 categories)
- 10c: Which of these methods did this school use to cover the vacancy(ies)? (7 choices, 2 categories each)
- 11: Is there a formal teacher evaluation program in use in this school? (2 categories)
- 12: Is there a formal program to help beginning teachers (such as a master or mentor teacher program) in use in this school? (2 categories)

Questions 10a-b, 11, and 12 were yes/no questions. Two had high response variance (10a-b) and two had moderate response variance (11 and 12) over all cases. Of these, all but question 11 had significantly lower response variance in the "mm" cases than the "mt/tt" cases. However, the response variance was still fairly high. (See table Q on page 17.)

Question 10c was a "mark all that apply" question. We analyzed this question using the "mention/did not mention" criteria. None of the categories met the minimum requirements to compute a reliable index. (See table Q on page 19.)

**Table Q. Response Variance and Gross Difference Rates:
Teaching Vacancies / Teacher Programs
(Questions 10a-c, 11, and 12)**

| <u>Question</u> | <u>L-fold Index</u> | | | <u>GDR (%)</u> | | |
|---|---------------------|-----------|-----------|----------------|-----------|-----------|
| | <u>total</u> | <u>mm</u> | <u>tt</u> | <u>total</u> | <u>mm</u> | <u>tt</u> |
| 10a (any vacancies) | 55.1 | 40.1 | 69.8 | 19.1 | 13.0 | 25.7 |
| 10b (vacancies that could not be filled) | 52.6 | 41.2 | 65.6 | 10.0 | 7.4 | 13.4 |
| 10c-1 Canceled planned course offerings | * | * | * | 5.4 | 0.0 | 14.3 |
| 10c-2 Expanded some class sizes | * | * | * | 2.7 | 0.0 | 7.1 |
| 10c-3 Added sections to other teachers' normal teaching loads | * | * | * | 8.1 | 4.3 | 14.3 |
| 10c-4 Assigned a teacher of another subject or grade level to teach those classes | * | * | * | 27.0 | 21.7 | 35.7 |
| 10c-5 Used long-term and/or short-term substitutes | * | * | * | 16.2 | 4.3 | 35.7 |
| 10c-6 Used part-time or itinerant teachers | * | * | * | 8.1 | 4.3 | 14.3 |
| 10c-7 Hired a less qualified teacher | * | * | * | 27.0 | 21.7 | 35.7 |
| 11 (evaluation program) | 45.4 | * | 57.3 | 4.3 | 1.3 | 7.5 |
| 12 (program for beginning teachers) | 49.5 | 34.6 | 65.2 | 23.9 | 16.2 | 32.2 |

C. Response Variance Results: Teacher Survey, SASS-4

1. Assignment and Activity (This Year)

This group contains questions regarding the teachers' teaching assignment and the grade levels of the students in the respondent's classes.

Question one asked, "How do you classify your MAIN assignment at THIS school (i.e., the activity at which you spend MOST of your time) during this school year?" This question had moderate response variance. (See table R on page 21.)

Questions 10a and 10b asked:

- 10a-1: What is your MAIN teaching assignment at this school, that is, the field in which you teach the most classes? (7 categories)
- 10a-2: Is your teaching assignment equally divided between two fields? (2 categories)
- 10b-1: Do you teach classes in OTHER fields at this school? (2 categories)
- 10b-2: If yes, in what field do you teach the second most classes? (7 categories)

For question 10a-1 and 10b-2, the respondents chose from 54 teaching assignment fields. We collapsed these 54 fields into 7 main categories (the categories that were on the questionnaire):

- 1) General Education (3 choices)
- 2) Special Areas (20 choices)
- 3) Foreign Languages (6 choices)
- 4) Sciences (5 choices)
- 5) Vocational Education (8 choices)
- 6) Special Education (11 choices)
- 7) All Others (1 choice)

See Appendix 2 for a list of the fields of study in each category.

Question 10a-1 had low response variance, 10a-2 had high response variance, and 10b-1 and 10b-2 had moderate response variance. (See table R on page 21.)

Question 15 asked, "In what grade levels are the students in your classes at THIS school?" This was a "mark all that apply" question. For analysis we used the "mention/did not mention" criteria. All but three grade levels had low response variance. These three did not meet the minimum requirements to compute a reliable index. (See table R on page 21.)

**Table R. Response Variance and Gross Difference Rates:
Assignment and Activity (This Year)
(Questions 1, 10a-b, and 15)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|---|------------------------------|-------------------------|----------------|
| 1 MAIN assignment | 10 | 29.6 | 5.7 |
| 10a-1 MAIN teaching assignment | 7 | 14.0 | 9.9 |
| 10a-2 Teaching assignment field equally divided between two fields. | 2 | 75.9 | 6.1 |
| 10b-1 Do you teach classes in OTHER fields at this school? | 2 | 37.6 | 14.4 |
| 10b-2 Second teaching assignment | 7 | 33.5 | 18.0 |
| 15-1 Ungraded | 2 | * | 1.5 |
| 15-2 Prekindergarten | 2 | * | 1.7 |
| 15-3 Kindergarten | 2 | 16.2 | 3.3 |
| 15-4 1st | 2 | 15.0 | 4.1 |
| 15-5 2nd | 2 | 18.2 | 4.9 |
| 15-6 3rd | 2 | 17.6 | 4.9 |
| 15-7 4th | 2 | 19.1 | 4.7 |
| 15-8 5th | 2 | 15.8 | 4.4 |
| 15-9 6th | 2 | 17.7 | 5.2 |
| 15-10 7th | 2 | 16.0 | 6.0 |
| 15-11 8th | 2 | 15.7 | 6.0 |
| 15-12 9th | 2 | 15.3 | 6.8 |
| 15-13 10th | 2 | 13.0 | 5.9 |
| 15-14 11th | 2 | 12.7 | 5.9 |
| 15-15 12th | 2 | 13.6 | 6.3 |
| 15-16 Postsecondary | 2 | * | 1.2 |

2. Teaching Experience

This group contains questions about the respondent's teaching experience.

Questions 2 asked, "In what year did you begin your first teaching position (full-time or part-time) at the elementary or secondary level?" Question 6 asked, "In what year did you begin teaching at THIS school?" These were both open ended questions.

Per NCES' request, we created the following categories for analysis:

- | | |
|----------|---------------------|
| (1) 1991 | (5) 1985-1987 |
| (2) 1990 | (6) 1981-1984 |
| (3) 1989 | (7) 1976-1980 |
| (4) 1988 | (8) 1975 and before |

Questions 4a-b, 5a-b, and 17 were all open ended questions. They asked:

- 4a: How many years have you worked as a FULL-TIME elementary or secondary teacher in PRIVATE schools?
- 4b: How many years have you worked as a PART-TIME elementary or secondary teacher in PRIVATE schools?
- 5a: How many years have you worked as a FULL-TIME elementary or secondary teacher in PUBLIC schools?
- 5b: How many years have you worked as a FULL-TIME elementary or secondary teacher in PUBLIC schools?
- 17: In how many years do you plan to retire from teaching?

For analysis we created the following categories, per NCES' request:

- | | |
|-----------------------|------------------------|
| (1) less than 3 years | (3) 10 to 20 years |
| (2) 3 to 9 years | (4) more than 20 years |

Question 16 was a multiple choice question that asked, "How long do you plan to remain in teaching?" This question had high response variance. This is expected, since it is an attitudinal question, and respondent's attitudes can change over the course of time.

Table S (on page 23) shows the indices for each of these questions.

**Table S. Response Variance and Gross Difference Rates:
Teaching Experience
(Questions 2, 4a-b, 5a-b, 6, 16, and 17)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|---|------------------------------|-------------------------|----------------|
| 2 year of first teaching position | 8 | 9.4 | 6.3 |
| 4a FULL-TIME, PRIVATE schools | 4 | 8.8 | 5.3 |
| 4b PART-TIME, PRIVATE schools | 4 | 37.8 | 7.5 |
| 5a FULL-TIME, PUBLIC schools | 4 | 9.8 | 7.0 |
| 5b PART-TIME, PUBLIC schools | 4 | 42.5 | 6.6 |
| 6 year began teaching at this school | 8 | 15.6 | 13.1 |
| 16 How long do you plan to remain in teaching? | 5 | 66.6 | 46.8 |
| 17 In how many years do you plan to retire from teaching? | 4 | 32.4 | 21.0 |

For question 2 and 6, we also checked to see the difference in the number of years between responses. We used only those cases with a year response in both interviews. (See table T.)

**Table T. Case Status:
First Teaching Position / Began at This School
(Questions 2 and 6)**

| <u>Status</u> | <u># of cases</u> | |
|--|----------------------|--------------------|
| | <u>This Position</u> | <u>This School</u> |
| Number of Forms Keyed | 811 | 811 |
| Don't Know or Refused in reinterview | 0 | 1 |
| Blank in reinterview OR original interview | 33 | 49 |
| Year responses in BOTH interviews | 778 | 761 |

For question two, 80 percent of the respondents agreed exactly on the year, while 92 percent agreed within plus or minus 1 year. For question six, 73 percent agreed exactly, while 91 percent agreed within plus or minus one year. (See table U.)

**Table U. Difference in Responses:
Year of First Teaching Position / Year Began at
This School
(Questions 2 and 6)**

| <u>Question</u> | <u>Difference in Responses (Number of years)</u> | | | |
|-----------------------------|--|-----------|------------|---------------|
| | <u>0</u> | <u>1</u> | <u>2-5</u> | <u>> 5</u> |
| 2 (1st position) | 622 (80%) | 94 (12%) | 41 (5%) | 21 (3%) |
| 6 (began at this school) | 557 (73%) | 135 (18%) | 39 (5%) | 30 (4%) |

3. Degree Information

This group contains questions about the respondent's degrees. Questions 7a, 8a, and 9a were yes/no questions.

Questions 7b, 8b, and 9c were multiple choice questions. They asked for the respondent's major field of study for his/her degree(s). There were 79 choices for the respondent to choose from. We collapsed these 79 choices into 9 main categories (the categories that were on the questionnaire):

- (1) General Education (3 choices)
- (2) Subject Area Education (18 choices)
- (3) Special Education (11 choices)
- (4) Other Education (5 choices)
- (5) General (25 choices)
- (6) Foreign Languages (6 choices)
- (7) Natural Sciences (5 choices)
- (8) Social Sciences (5 choices)
- (9) Other (1 choice)

See Appendix 1 for a list of the fields of study in each category.

Question 9b was a "mark all that apply" question that asked, "What other degree(s) have you earned?" We used the "mention/did not mention" criteria to analyze this question.

Of the questions in this group, three had high response variance, two moderate, one low, and five did not meet the minimum requirements to compute a reliable index.
(See table V.)

**Table V. Response Variance and Gross Difference Rates:
Degree Information
(Questions 7a-b, 8a-b, and 9a-b)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|--|------------------------------|-------------------------|----------------|
| 7a Do you have a bachelor's degree? | 2 | * | 0.6 |
| 7b What was your major field of study? | 9 | 36.2 | 27.3 |
| 8a Do you have a master's degree? | 2 | 2.2 | 1.1 |
| 8b What was your major field of study? | 9 | 33.0 | 27.0 |
| 9a Do you have any other type of degrees? | 2 | 51.9 | 10.9 |
| 9b-1 Associate degree | 2 | 54.2 | 6.9 |
| 9b-2 Education specialist or professional diploma (at least one year beyond Master's level) | 2 | 62.7 | 5.2 |
| 9b-3 Doctorate or first professional degree (Ph.D., Ed.D., M.D., L.L.B., J.D., D.D.S.) | 2 | * | 0.4 |
| 9c-1 Associate degree | 9 | * | 56.0 |
| 9c-2 Education specialist or professional diploma | 9 | * | 43.8 |
| 9c-3 Doctorate or first professional degree | 9 | * | 0.0 |

4. Training / Teaching Certificate

This group contains questions regarding any training the respondent may have taken, and what type of teaching certificate he/she has. There were 5 yes/no questions and one multiple choice question. These questions had moderate to high response variance. (See table W.)

**Table W. Response Variance and Gross Difference Rates:
Training / Teaching Certificate
(Questions 11, 12, 13a-b, and 14a-b)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|--|------------------------------|-------------------------|----------------|
| 11 Have you ever taken any college level COURSES in teaching methods or education? | 2 | 68.8 | 4.2 |
| 12 Have you ever taken any college level COURSES in the subject area which is your MAIN teaching assignment? | 2 | 73.6 | 8.3 |
| 13a Do you have a teaching certificate in this state in your MAIN teaching assignment field? | 2 | 36.9 | 3.9 |
| 13b What type of certification do you hold in this field? | 4 | 52.6 | 17.1 |
| 14a During your first year of teaching, did you participate in a formal teacher induction program? | 2 | 56.2 | 17.8 |
| 14b Are you currently a master or mentor teacher in a formal teacher induction program? | 2 | 49.7 | 9.9 |

5. Main Activity (Past and Future)

This group has three multiple choice questions. The first asks about the respondent's main activity the year before he/she began teaching. The second asks about the respondent's main activity last school year. The third asks about what the respondent's main activity will be next school year. All three questions had moderate response variance. (See table X on page 27.)

**Table X. Response Variance and Gross Difference Rates:
Main Activity (Past and Future)
(Questions 3 and 18a-b)**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|---|------------------------------|-------------------------|----------------|
| 3 What was your MAIN activity the year before you began teaching at the elementary or secondary level? | 10 | 38.4 | 15.2 |
| 18a What was your MAIN activity LAST SCHOOL YEAR? | 14 | 27.6 | 7.0 |
| 18b What do you expect your MAIN activity will be NEXT SCHOOL YEAR? | 14 | 48.4 | 7.0 |

6. Salaries

This group contains questions about the respondent's teaching salary and other salaries he/she may have received during the school year. There are five yes/no questions and one open-ended question.

The open-ended question asked, "DURING THE CURRENT SCHOOL YEAR, what is your academic base year salary for teaching in this school?" The respondent was to provide his/her salary to the nearest whole dollar. Per NCES, we divided the responses into the following categories, split by public and private school teacher:

Public

- (1) \$0 - \$22,000
- (2) \$22,001 - \$27,000
- (3) \$27,001 - \$34,000
- (4) \$34,001 - \$75,000

Private

- (1) \$0 - \$13,500
- (2) \$13,501 - \$18,000
- (3) \$18,001 - \$23,000
- (4) \$23,001 - \$52,000

Table Y (on page 28) shows the breakdown of response variance for each question in this group.

**Table Y. Response Variance and Gross Difference Rates:
Salaries
(Questions 19a(1-3) and 19b(1-3))**

| <u>Question</u> | <u>No. of Categories</u> | <u>L-fold Index</u> | <u>GDR (%)</u> |
|--|------------------------------|-------------------------|----------------|
| 19a During the summer of 1990, did you have any earnings from - | | | |
| 19a(1) Teaching summer school in this or any other school? | 2 | 18.1 | 4.2 |
| 19a(2) Working in a nonteaching job in this or any other school? | 2 | 80.0 | 8.3 |
| 19a(3) Working in any NONSCHOOL job? | 2 | 30.2 | 10.8 |
| 19b During the current school year - | | | |
| 19b(1) Salary - Public Teachers | 4 | 23.2 | 17.3 |
| 19b(1) Salary - Private Teachers | 4 | 16.5 | 12.0 |
| 19b(2) Do you, or will you, earn any additional compensation from your school for extra curricular or additional activities? | 2 | 22.5 | 10.6 |
| 19b(3) Have you EARNED income from any other sources this year? | 2 | 56.8 | 16.1 |

For the "academic base year salary" question (19b(1)), we computed the percent difference between the reinterview and original salary response. We used only those cases with a salary response in both interviews. (See table Z on page 29.)

**Table Z. Case Status:
Academic Base Year Salary
(Question 19b(1))**

| <u>Status</u> | <u>Number of cases</u> | | |
|---|------------------------|---------------|----------------|
| | <u>Total</u> | <u>Public</u> | <u>Private</u> |
| Number of Forms Keyed | 811 | 709 | 102 |
| Don't Know or Refused in reinterview | 41 | 34 | 7 |
| Blank in reinterview OR original interview | 69 | 49 | 20 |
| Salary responses in BOTH interviews | 701 | 626 | 75 |

Seventy-one percent of the public school teachers, and 75 percent of the private school teachers agreed on both interviews rate for this question was 71 percent for the public school teachers, and 75 percent for the private school teachers. (Responses were within ± 5 percent of each other.) (See table AA.)

**Table AA. Percent Agreement:
Academic Base year Salary
(Question 19b(1))**

| <u>Question</u> | <u>% Agreement Categories</u> | | |
|-----------------|----------------------------------|------------------------|----------------|
| | <u>within ± 5</u> | <u>> 6, < 15</u> | <u>> 15</u> |
| 8a - Total | 499 (71%) | 111 (16%) | 91 (13%) |
| 8a - Public | 443 (71%) | 99 (16%) | 84 (13%) |
| 8a - Private | 56 (75%) | 12 (16%) | 7 (9%) |

III. Methodology

A. General

A reinterview survey designed to estimate response variance (1) seeks to independently replicate the original interview, and (2) does not identify and reconcile differences between the original survey and reinterview.

We use the index of inconsistency, L-fold index, and gross difference rate to estimate the level of response variance for a question.

1. Index of Inconsistency and L-fold Index

The index of inconsistency is the ratio of the simple response variance to the total population variance of a characteristic. An index of 50 means that half the total variance of the estimate can be attributed to response variance.

The L-fold index is a weighted average of indices of inconsistency across all categories for the question.

Table BB shows how we interpret the index of inconsistency and the L-fold index.

Table BB. Interpreting the Indexes

| <u>If the index value is:</u> | <u>Level of Response Variance</u> | <u>Interpretation</u> |
|-------------------------------|-----------------------------------|-----------------------|
| < 20 | Low | Not a Major Problem |
| 20 - 50 | Moderate | Some Problems |
| > 50 | High | Major Problems |

High and moderate response variance means the question itself causes at least as much of the variability in the data as the variability among respondents in the population.

High values of the index indicate that:

- (1) improvements are required in the methods used to collect these data, (ie. the questions are poorly worded, and may confuse the respondent),
- (2) respondents may not be able to provide accurate information to the detail desired; that is, the size and number of categories.

2. Gross Difference Rate (GDR)

For a two-category question (ie. yes/no), one-half the GDR equals the simple response variance. The GDR also represents the percentage of respondents who change their answers between the original interview and the reinterview.

In a question with a gross difference rate of 20 percent, one fifth of the respondents changed their answer.

The GDR is more difficult to interpret than the index of inconsistency. Large GDRs indicate serious response variance in the data.

B. SASS Questionnaires

We used four reinterview questionnaires to measure response variance of certain questions selected from the original SASS questionnaires.

- The SASS-2(R) contained questions from the SASS-2A and SASS-2B, Questionnaires for Public and Private School Administrators.
- The SASS-3(R)M and SASS-3(R)T contained questions from the SASS-3A, SASS-3B, and SASS-3C, Questionnaires for Public, Private, and Bureau of Indian Affairs Schools. The SASS-3(R)M was used for a mail reinterview and the SASS-3(R)T was used for a telephone reinterview. Both reinterview questionnaires contained the same questions.
- The SASS-4(R) contained questions from the SASS-4A and SASS-4B, Questionnaires for Public and Private School Teachers.

The questionnaires had four types of questions:

- yes/no
- multiple choice
- mark all that apply
- open-ended, such as number of students and annual salary

C. Sample Selection and Implementation

We selected the three reinterview samples (Administrators, Schools, and Teachers) from the original SASS sample files. We matched the reinterview sample files against the DSD interview check-in file to get the status of the original interview (ie. interview, noninterview, out of scope, etc.)

- The regional offices reinterviewed by telephone original administrator (SASS-2) and teacher (SASS-4) cases completed by mail AND telephone.

- We attempted to reinterview by mail original school (SASS-3) cases completed by mail. The regional offices reinterviewed by telephone original school cases completed by telephone, and original school cases that weren't reinterviewed by mail.

Clearly for the administrator and teacher original mail-return cases, the reinterview was not a perfect replication of the original interview. We analyzed separate tables and measures for these cases to see if the different methodologies produced different results. There was no statistical evidence that the two methodologies produced different results.

The interview rates for the three reinterview samples (administrator, school, and teacher) were 93.5 percent, 91.0 percent, and 82.8 percent, respectively. Table CC shows the status of the reinterview samples.

Table CC. Reinterview Samples and Status

| <u>Status</u> | <u>SASS-2(R)</u> | <u>No. of Cases</u> | | | <u>SASS-4(R)</u> |
|-----------------------|------------------|---------------------|---------------------|-------------------|------------------|
| | | <u>SASS-3(R)M</u> | <u>SASS-3(R)T</u> | <u>3(R) total</u> | |
| In sample | 1123 | 566 | (1123) ¹ | 637 | 1101 |
| Completed | | | | | |
| Reinterview | 980 | 479 | (941) | 462 | 811 |
| Refused Reinterview | 19 | 5 | (12) | 12 | 13 |
| Original Noninterview | 75 | 0 | (89) | 89 | 121 |
| Other Reint. Nonint. | 49 | 2 | (76) | 74 | 156 |

¹ The sample totals for the SASS-3(R)M and SASS-3(R)T do not equal 1123 due to the fact that 80 mail reinterview cases were not returned. These cases were attempted by telephone.

Major Fields of Study (by Category)
(Questions 1b, 1e, and 2b on the SASS-2(R))
(Questions 7b, 8b, and 9c on the SASS-4(R))

(1) General Education

- Pre-elementary/early childhood education
- Elementary education
- Secondary education

(2) Subject Area Education

- Agricultural education
- Art education
- Bilingual education
- Business, commerce, and distributive education
- Cross cultural education
- English education
- English as a second language
- Foreign languages education
- Home economics education
- Indian education (Native American)
- Industrial arts, vocational and technical, trade and industry education
- Mathematics education
- Music education
- Physical education/health education
- Reading education
- Religious education
- Science education
- Social studies/social sciences education

(3) Special Education

- Special education, general
- Emotionally disturbed
- Mentally retarded
- Speech/language impaired
- Deaf and hard-of-hearing
- Visually handicapped
- Orthopedically impaired
- Mildly handicapped
- Severely handicapped
- Specific learning disabilities
- Other special education

(4) Other Education

- Curriculum and instruction
- Educational administration
- Educational psychology
- Counseling and guidance
- Other education

(5) General

- Agriculture and natural resources
- American Indian studies (Native American)
- Other area and ethnic studies
- Architecture and environmental design
- Art, fine and applied
- Business and management
- Communications and journalism
- Computer and information sciences
- Drama, theater
- Engineering
- English (literature, letters, speech, classics)
- General studies
- Health professions and occupations
- Home economics
- Humanities
- Law
- Library science
- Mathematics
- Military science
- Multi/interdisciplinary studies
- Music
- Philosophy
- Psychology
- Public affairs and services
- Religion, theology

(6) Foreign Languages

- French
- German
- Latin
- Russian
- Spanish
- Other foreign languages

(7) Natural Sciences

- Biology/life science
- Chemistry
- Geology/earth science
- Physics
- Other natural sciences

(8) Social Sciences

- Economics
- History
- Political science and government
- Sociology
- Other social sciences

(9) Other

- Other

Teaching Assignment Fields (by Category)
(Questions 10a-b on the SASS-4(R))

(1) General Education

- Prekindergarten
- Kindergarten
- General elementary

(2) Special Areas

- American Indian studies (Native American)
- Art
- Basic skills and remedial education
- Bilingual education
- Computer science
- Dance
- Drama/theater
- English/language arts
- English as a second language
- Gifted
- Home economics
- Journalism
- Mathematics
- Military science
- Music
- Philosophy
- Physical education, health
- Reading
- Religion
- Social studies/social sciences

(3) Foreign Languages

- French
- German
- Latin
- Russian
- Spanish
- Other foreign languages

(4) Sciences

- Biology
- Chemistry
- Geology/earth science/space science
- Physics
- General and all other science

(5) Vocational Education

- Accounting
- Agriculture
- Business, marketing
- Health occupations
- Industrial arts
- Trade and industry
- Technical
- Other vocational education

(6) Special Education

- Special education, general
- Emotionally disturbed
- Mentally retarded
- Speech/language impaired
- Deaf and hard-of-hearing
- Visually handicapped
- Orthopedically impaired
- Mildly handicapped
- Severely handicapped
- Specific learning disabilities
- Other special education

(7) All Others

- All others

Did Mail Respondents Photocopy their Questionnaires?
SASS-3(R) - School Questionnaire

Mail respondents using photocopies of their original interviews could account for only a small part of the mail-mail versus mail-telephone / telephone-telephone differences.

We performed an additional analysis which eliminated the explanation that mail reinterview respondents used photocopies of their original completed questionnaires, thus reducing response variance. We concluded no more than about six percent of the mail reinterview respondents were likely to have used photocopies, and that these cases had little effect on the response variance differences between the mail-mail and the mail-telephone / telephone-telephone methodologies. Even after deleting these cases, the mail-mail group displayed significantly lower response variance.

- We hypothesized that respondents who copied their original responses to answer the reinterview would have exactly matching answers between the original and reinterview surveys.
- We discarded cases that did not match exactly between the two surveys, one question at a time.
- Only 40 percent of the mail reinterview respondents matched exactly on the first question (number of students this year). After five questions only 12 percent still matched exactly. We continued for all the questions in the reinterview. Ultimately, 21 respondents (4.4 percent) matched exactly on all the questions. We considered respondents who matched on the first 11 questions we examined to have used photocopies - 31 respondents (6.5 percent). The reinterview contained 46 questions in all (treating each "mark all that apply" category as an individual question), so we believe this estimate over-states the number of "copy-users," rather than under-states it.
- Finally, we eliminated these likely "copy-users" and recomputed the mail reinterview response variance measures for the four school survey questions in this report. Eliminating the copy-users had only a negligible effect on the differences between the mail-mail results and the mail-telephone / telephone-telephone results. The mail reinterview still has significantly lower response error than the telephone reinterview.